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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,686	07/20/2001	Roberto Ayala	YOR920010275US1/131-0005	9950

7590 04/06/2007
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EXAMINER

THEIN, MARIA TERESA T

ART UNIT PAPER NUMBER

3627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/909,686

Applicant(s)

AYALA ET AL.

Examiner

Marissa Thein

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-23 and 25-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-23, and 25-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicants' "Amendment" filed on January 19, 2007 has been considered.

Claims 1, 3, 17, 19, and 33-34 are amended. Claims 1-7, 9-23, and 25-34 remain pending in this application and an action on the merits follow.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 6-7, 9-10, 13-18, 22-23, 25-26, and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,006,196 to Feigin et al. in view of U.S. Statutory Invention Registration No. H1743 to Graves et al.

Regarding claims 1, 9, 14-17, and 29-32, Feigin discloses a computer-implemented method and a storage medium encoded with machine-readable computer program code for managing inventory comprising: receiving an updated demand forecast and updated demand forecast (col. 5, lines 49-col. 6, line 2; col. 2, lines 22-52); selecting a search criteria for determining projected periods of supply (col. 3, lines 19-25; col. 5, lines 39-43); and; determining for a given time period: projected inventory level using the projected data, supplier commitment data, and prior periods' projected inventory levels; and projected days of supply of inventory using the projected inventory

level for a current item period and projected forecast data for subsequent periods (col. 6, lines 3-17; col. 7, lines 57-col. 8, line 3).

Feigin does not explicitly disclose extracting current data related to said search criteria, the current data including supplier commitment data; the data including a quantity of said stock item expected to be consumed during at least one of said number of specified time periods and when said projected days of supply is out of a predetermined range for a given time period, taking a corrective action; and the projected days of supply is measured in time increments including one of days, weeks, and months (**claims 9 and 29**); the corrective action includes modifying the supplier commitment data, delaying a shipment, and increasing the supplier commitment data (**Claims 14-16 and 30-32**). Feigin discloses the management of inventory that comprises a distribution resource-planning engine (DRP) (Col. 1, lines 7-10). The DRP comprises an input means for inputting to the engine information derived from a database, a forecasts engine, and an inventory planning engine comprising inventory status, planning parameters, and demand forecasts; a logic means; and an output means for output means (col. 2, lines 37-52).

Graves, on the other hand, teaches extracting current data related to said search criteria, the current data including supplier commitment data (col. 10, line 59- col. 11, line 9; col. 14, lines 5-13; col. 17, lines 28-59); the data including a quantity of said stock item expected to be consumed during at least one of said number of specified time periods and when said projected days of supply is out of a predetermined range for a given time period, taking a corrective action; and the projected days of supply is

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measured in time increments including one of days, weeks, and months (**claims 9 and 29**); the corrective action includes modifying the supplier commitment data, delaying a shipment, and increasing the supplier commitment data (**Claims 14-16 and 30-32**) (col. 2, lines 29-34; col. 2, lines 63 – col. 3, line 6; col. 3, lines 48-65; col. 4, lines 57-62; col. 6, lines 50-55; col. 10, lines 59-67; col. 11, lines 1-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method and storage medium encoded with machine-readable program of Feigin, to include extracting current data related to said search criteria, the current data including supplier commitment data; the data including a quantity of said stock item expected to be consumed during at least one of said number of specified time periods and when said projected days of supply is out of a predetermined range for a given time period, taking a corrective action; and the projected days of supply is measured in time increments including one of days, weeks, and months; the corrective action includes modifying the supplier commitment data, delaying a shipment, and increasing the supplier commitment data, as taught by Graves, in order to provide a mechanism by which the delivery of new, replacement supplies can be shifted forward or delayed (Graves col. 1, lines 37-39), thus providing an automatic ordering method in which new supplies are ordered with minimum human intervention (Graves, col. 1, lines 48-50).

Regarding claims 2, 6-7, 13, 18, 22-23, and 25, Feigin the given time period is established by at least one of a supplier and manufacturer (Figure 1; col. 5, lines 35-48; col. 6, lines 3-18); the number of convenient time periods includes selected horizon (col.

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3, lines 19-52 col. 6, lines 3-18); the number of convenient time periods is measured in increments of time, the increments include one of: days, weeks, and months (col. 3, lines 28-35); the supplier commitment data includes a quantity of said stock item a supplier commits to provide for a manufacturer; (col. 3, lines 28-35).

Regarding claims 10 and 26, Feigin discloses the supplier commitment data includes a quantity of the stock item a supplier commits to provide for a manufacturer (col. 3, line 54 – col. 4, line 22); the determining for a given time period the projected inventory level include performing a calculation comprising:

$$PI(n) = PI(n-1) - F(n-1) + C(n-1)$$
, wherein further PI represents a projected inventory value; n represents a variable, the variable representing a time period; F represents a projected forecast value; and C represents a supplier commitment value. (col. 3, line 20 – col. 4, line 21; col. 6, lines 3-17).

Claims 3-5, 11-12, 19-21, 27-28, and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,006,196 to Feigin et al. and U.S. Statutory Invention Registration No. H1743 to Graves et al as applied to claims 1 and 17 above, and further in view of U.S. Patent Application Publication No. 2002/0072986 to Aram.

Regarding claims 3-5, 11-12, 19-21, and 27-28, Feigin and Graves substantially discloses the claimed invention, however, the combination does not explicitly disclose providing a search criteria including a part number identifying the stock item (**Claims 3 and 19**); part name identifying the stock item (**Claims 4 and 20**); part description identifying the stock item (**Claims 5 and 21**); the predetermined range for the projected

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says of supply is established by at least one of manufacturer, and a supplier (**Claims 11 and 27**); the predetermined range for the projected says of supply is a single number (**Claims 12 and 28**). The combination discloses the management of inventory that comprises a distribution resource planning engine (DRP) (Feigin, col. 1, lines 7-10). The DRP comprises an input means for inputting to the engine information derived from a database, a forecasts engine, and an inventory planning engine comprising inventory status, planning parameters, and demand forecasts; a logic means; and an output means for output means (Feigin, col. 2, lines 37-52).

Aram, on the other hand, teaches providing a search criteria including a part number identifying the stock item (**Claims 3 and 19**) (abstract); part name identifying the stock item (**Claims 4 and 20**) (abstract); part description identifying the stock item (**Claims 5 and 21**) (abstract); the predetermined range for the projected says of supply is established by at least one of manufacturer, and a supplier (**Claims 11 and 27**) (paragraphs 150-151); and the predetermined range for the projected says of supply is a single number (**Claims 12 and 28**) (paragraphs 150-152) (paragraphs 150-152) .

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combination, to include providing a search criteria including a part number, name, description; and the predetermined range for the projected says of supply is established by at least one of manufacturer, and a supplier, as taught by Aram, in order to avoid the risk of letting down a customer by not fulfilling an order (Aram paragraph 150).

Regrinding claims 33-34, Feigin and Graves substantially discloses the claimed invention, and specifically the projected period or time of supply is determined for each time period by performing the calculation of a projected period of supply value, as recited in the claim (Feigin, the objective of DRP logic is to project, for the product and location of interest the following quantities for all future periods, col. 3, lines 31-34). However, the combination does not explicitly disclose the period or time is day.

Aram, on the other hand, discloses the period or time is day in calculating a period of supply value (paragraph 113; paragraph 143; paragraph 145)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combination, to include the period or time is day in calculating a period of supply value, as taught by Aram, in order to facilitate improved planning ahead (Aram, paragraph 6) thus providing an efficient operation (paragraph 6).

Response to Arguments

Applicant's arguments filed January 19, 2007 have been fully considered but they are not persuasive.

Applicants remark that " the combination of Feign and Graves does not explicitly disclose providing a search criteria including a part number identifying the stock item; part name identifying the stock item; part description identifying the stock item".

Examiner notes that the combination of Feign, Graves and Aram discloses the "search criteria including a part number identifying the stock item; part name identifying the stock item; and part description identifying the stock item". Feign discloses a

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Distribution Resource Planning (DRP) to determine recursive inventory and future replenishment requirement (col. 3, lines 7-10). The DRP logic is based on a set of equations that characterize the recursive inventory dynamics over time. The principal logic of DRP involves the recursive calculation of the replenishment, the on-hand inventory, and the back ordered demand in the future for a specific product at a specific location. (Col. 3, lines 19-25)

Such logic of DRP involves the recursive calculation of the replenishment, the on-hand inventory, and the back ordered demand in the future for a specific product at a specific location is considered the search criteria.

The Examiner then turns to Aram to teach the criteria being part number, part name, and part description. Aram teaches a data store for storing data comprising an item identifier and a corresponding indication of a level of stock of the item (paragraph 7). Aram further teaches demand schedule related data. Demand schedule table stores records for parts indicating a safety stock level, distributor's and supplier's on-hand quantity of parts, a total number of customer requested parts, and the purchase order date, and part demand information. The demand information comprises a part number, a due date, and a total number of parts demanded by the due date comprising an actual demanded number of parts and a forecast demanded number. (Paragraph 120)

Applicants remark that " Feign and Graves and Aram alone or in combination fail to teach or make obvious extracting current data related to said search criteria, the current data including supplier commitment data".

Examiner notes that Feign was cited for teaching the search criteria as discussed above. The Examiner then turns to Graves to teaches the extracting current data to said search criteria, the current data including supplier commitment data". Graves teaches the selecting of a projected use management mode to review information related the rate of usage of the chemical in the storage tank. The user is given the option of selecting a production schedule mode which teaches how much chemical is anticipated to be required or a releasers management mode that discloses when replenishment chemicals are to be delivered (col. 14, lines 5-13). Graves further discloses means for communicating with a supplier of the consumable supplies to modify a scheduled delivery of additional consumable supplies, based upon the projection of when the consumable supplies will be completely depleted, if the scheduled delivery would result in an undesirable quantity of stored consumable supplies (col. 3, lines 1-6). Graves also discloses the processing unit issues notification of the supplier and additional communication are issued if the supplier fails to response to a previously issued communication within a predetermined period of time (col. 3, lines 20-26).

Such selecting of a projected use management mode to review information related the rate of usage of the chemical in the storage tank; selecting a production schedule mode which teaches how much chemical is anticipated to be required or a releasers management mode that discloses when replenishment chemicals are to be delivered; means for communicating with supplier of the consumable supplies and the processing unit issues notification of the supplier and additional communication are

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issued if the supplier fails to response to a previously issued communication within a predetermined period of time are considered "extracting current data related to said search criteria, the current data including supplier commitment data".

Applicants remark that the combination of Feigin, Graves and Aram does not disclose the performing of the calculation.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Nonetheless, Feign discloses DRP logic that is a mathematical algorithm to calculate future on-hand inventory and future replenishment requirements (col. 3, lines 7-9). The DRP logic is based on a set of recursive equations that characterized the inventory dynamics over time (col. 3, lines 20-22). The DRP logic is implemented by time periods with a time horizon (col. 3, lines 29-30).

Such a mathematical algorithm to calculate future on-hand inventory and future replenishment requirements; and a set of recursive equations that characterized the inventory dynamics over time are considered performing the calculation.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa Thein whose telephone number is 571-272-6764. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ryan Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Mtot
April 2, 2007

Michael Cuff 4/2/07
MICHAEL CUFF
PRIMARY EXAMINER